

New Jersey Housing and Mortgage Finance Agency

Guide to NJHMFA ENERGY STAR Equivalency Requirements

For instances when a funding program monitored by NJHMFA requires ENERGY STAR Certification

2013

This document was created as a handbook to explain the documents NJHMFA requires for successful completion of a NJ ENERGY STAR Homes Program. We acknowledge that not every residential construction project can participate in the NJ ENERGY STAR Homes program. Pay for Performance (P4P) or the Home Performance with Energy Star program addresses those projects that need a NJ ENERGY STAR Homes equivalent. The requirements within this guide are specific to NJHMFA financed projects – although we encourage other New Jersey state agencies and local government entities to reference this document when setting up similar green building and energy efficiency requirements, in order to have consistency across the state.

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NJHMFA PROGRAMS REQUIRING ENERGY STAR OR ENERGY STAR EQUIVALENT CERTIFICATION:

Low Income Housing Tax Credits 4% and 9%

The NJ LIHTC Qualified Allocation Plan's ENERGY STAR requirement can be found in the following location:

"5:80-33.12 Application to a cycle/eligibility requirements

- (c) Applications shall meet all of the eligibility requirements listed in this section in order to be admitted into a cycle. NJHMFA reserves the right to contact the applicant if the need arises.
- 8. Successful participation in the NJ Clean Energy Program's (NJCEP) NJ ENERGY Efficient Homes Program or equivalent . . . "

Green Future

The current Green Future Guidelines can be found on NJHMFA website, http://www.state.nj.us/dca/hmfa/developers/credits/green/

"EE-1: All units ENERGY STAR certified or ENERGY STAR Equivalent"

Community Development Block Grant Disaster Recovery (CDBG-DR)

The CDBG-DR Action Plan governs the following CDBG programs- Fund for Restoration of Multifamily Housing (FRM), Fund for Restoration of Multifamily Housing - Public Housing Authority Set-Aside Program (FRM-PHA), & Sandy Special Needs Housing Fund (SSNHF). The ENERGY STAR requirement can be found in the following location:

Section 4-Housing

"New Jersey will require all replacement and new construction to meet green building standards by requiring compliance with ENERGY STARTM."

4.1 Homeowner Assistance Programs

"Reconstruction Standard: When applicable, replacement and new construction will meet the 2009 Residential International Code and the green building standards by requiring compliance with ENERGY STARTM."

6.1 Promotion of High Quality, Durable, Energy Efficient, and Mold Resistant Construction Methods "Efficiency may be demonstrated through design based on LEED, ENERGY STARTM, and/or other

comparable guidelines and rating systems."

6.3 Green Building

The State will require replacement and new construction to meet green building standards by requiring compliance with ENERGY STAR $^{\mathrm{TM}}$. "

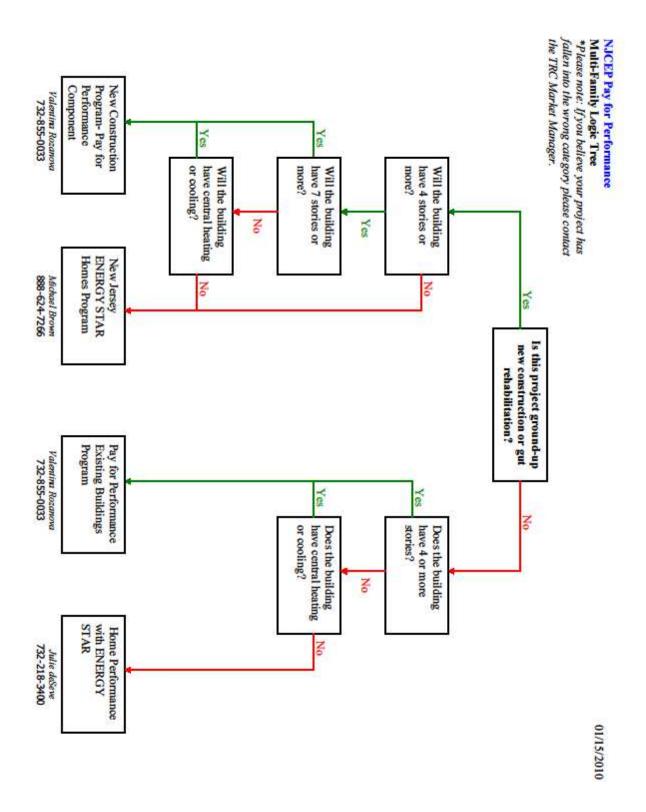
IMPORTANT NOTES:

The program chosen for compliance with NJHMFA's LIHTC ENERGY STAR requirements must receive approval from NJHMFA prior to submission of any NJHMFA funding application, unless able to participate in the EPA or NJ ENERGY STAR Homes program (most new construction or gut rehabilitation projects under 7 stories).

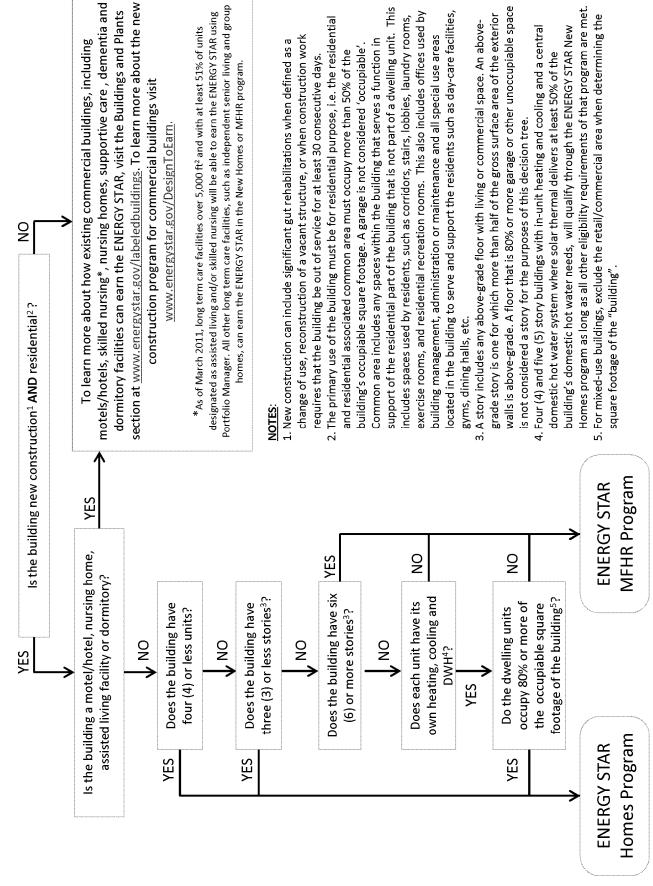
- The first course of action is to see if your project can participate in the NJ ENERGY STAR Homes program. If not, then NJHMFA will require a letter from the NJ ENERGY STAR Homes Program Manager or designated representative stating why your project cannot participate. There are currently protocols within the NJ ENERGY STAR Homes program to address a range of residential building types.
- To determine the ENERGY STAR-compliant program for your project follow the Multifamily Logic Tree on the following page (Page 4).
- The NJ Office of Clean Energy, administrator of the New Jersey Clean Energy Program, has expanded its ENERGY STAR programs. These changes began in 2009, and are continued in the current programs. The program changes expand options for high-rise, historic, and moderate rehabilitation properties.
 - o **NJ ENERGY STAR Homes** now offers three Tiers to provide greater incentives for higher performing (more energy efficient) buildings.
 - Tier 1 NJ ENERGYEFFICIENT- based on technical compliance elements of the previous ENERGY STAR Version 2.0 plus New Jersey specific requirements. This tier is not eligible to earn the ENERGY STAR label or be marketed as ENERGY STAR qualified.
 - Tier 2 ENERGY STAR Homes v 3.0 Meets all EPA ENERGY STAR Homes v 3.0 standards and all additional New Jersey requirements. This tier is eligible to earn the ENERGY STAR label or be marketed as ENERGY STAR qualified.
 - Tier 3 Climate Choice Homes- A set of requirements for meeting energy performance at least 50% better than IECC 2006 before the addition of on site renewable energy generation, based on EPA's original "Climate Choice" guidelines. The requirements are anticipated to transition to EPA's new "Concept Home" guidelines, when released, as the underlying technical standard.
 - Multi-family High-Rise Program- Requirements for applicable multi-family buildings over three stories will transition from the previous EPA ENERGY STAR Multi-family High Rise (MFHR) Pilot to the new EPA ENERGY STAR Multi-family High Rise (MFHR) Program standards released August 30, 2011.
 - o **NJ Home Performance with ENERGY STAR** is working with multifamily buildings that are no more than three floors and have no elevator.
 - The NJ Pay for Performance program is a whole-building energy audit program that includes incentives for implementation and actual energy saving. This program accepts existing and new construction multifamily buildings that are too big to participate in NJ ENERGY STAR Homes or Home Performance with Energy Star.

- These NJ Clean Energy programs are state-authorized, created by industry professionals, sources of third-party verification, and good alternatives for compliance with NJHMFA's ENERGY STAR Equivalency requirements (if not able to participate in NJ ENERGY STAR Homes).
- NJHMFA is not responsible for advising or monitoring for program compliance; we only look for checkpoints and final certification / completion.
- If you cannot find an equivalency program within this document that fits your project, contact the NJHMFA to set up a meeting and work out an equivalency agreement (see sample letter at the end of this document). NJHMFA will be responsible for confirming ENERGY STAR Equivalency if you are not participating in an NJ Clean Energy Program.
- Manufactured housing must meet specific additional NJ ENERGY STAR requirements check with the NJ ENERGY STAR Homes Program prior to contracting.

DECISION TREE for All Projects with an ENERGY STAR Requirement:



EPA ENERGY STAR Multifamily New Construction Program Decision Tree



EPA ENERGY STAR HOMES:

www.energystar.gov

http://www.energystar.gov/index.cfm?c=bldrs_lenders_raters.pt_bldr

Note: NJHMFA requires Tier 1 NJ *ENERGYEFFICIENT* as the LIHTC threshold, ENERGY STAR version 3 is a Green Point option.

"ENERGY STAR, the government-backed symbol for energy efficiency, provides a powerful platform for utilities, state agencies, and other organizations implementing energy efficiency programs. ENERGY STAR for New Homes are significantly more energy efficient than minimum code while improving affordability, comfort, indoor air quality, and durability of homes. Sponsoring an ENERGY STAR for New Homes program is an opportunity for long-term peak and energy demand savings that can standalone or complement other residential energy efficiency initiatives."

In order to receive EPA ENERGY STAR Homes certification, you will need to hire a certified HERS Rater to review your plans, conduct the necessary inspections, and issue an ENERGY STAR Certificate. The ENERGY STAR Homes program is geared specifically towards single-family homes and low-rise (up to 3 stories) new construction or gut rehabilitation projects.

MAJOR CHANGES WITH THE ADOPTION OF VERSION 3:

"In 2010, EPA released new, Version 3 guidelines for the ENERGY STAR for Homes program that will allow ENERGY STAR to continue to define energy-efficient home construction. In particular, the additional cost-effective technologies and quality installation practices specified ensure that every qualified home includes a comprehensive package of best building science measures."

"With Version 3, homes must meet baseline ENERGY STAR requirements using either a prescriptive or performance path. Both options are based on a set of specifications called the ENERGY STAR Reference Design. When the prescriptive path is used, the home is simply built according to the Reference Design specifications (similar to the Builder Option Package approach used in ENERGY STAR Version 2). No trade-offs are allowed when the prescriptive path is used.

In contrast, the Version 3 performance path has been significantly changed from the Version 2 approach. Using the Version 3 performance path, the home is modeled using the ENERGY STAR Reference Design specifications to establish an Initial HERS Index Target Score. For larger homes, a Size Adjustment Factor (SAF) is applied to the Initial Target Score when the home exceeds a defined 'Benchmark Home Size,' based on the number of bedrooms. The builder then has the flexibility to select a custom set of energy-efficiency measures, so long as the resulting HERS Score for the home meets or performs better than the HERS Index Target Score (size-adjusted, when appropriate) and all other requirements are met (e.g., minimum efficiency for windows, insulation).

In addition to the baseline requirements, there are new checklists with detailed mandatory requirements for Thermal Enclosures, HVAC Quality Installation, and Water Management. Note that there will be other customized requirements in states where the energy code exceeds the 2009 IECC." (EPA)

NJ ENERGY STAR HOMES:

New Jersey's Clean Energy Program www.njcleanenergy.com c/o Honeywell 1-866-NJSMART

The New Jersey ENERGY STAR Homes program is an EPA-verified ENERGY STAR program. NJ ENERGY STAR Homes is the same as the EPA ENERGY STAR Homes Program except for the following:

- NJ *ENERGY*EFFICIENT is based on technical compliance elements of the previous ENERGY STAR Version 2.0 plus New Jersey specific requirements, but is not eligible to earn the ENERGY STAR label or be marketed as ENERGY STAR qualified.
- NJ ENERGY STAR Homes provides financial incentives, the federal program does not.
- This program requires that at least one utility be individually metered, with individual heating and/or cooling systems for each dwelling unit.
- The Program includes the EPA ENERGY STAR Multi-family High-Rise program.
- It also includes a Microload (New Jersey Climate Choice Homes) tier. A select few may participate at the discretion of the NJ Office of Clean Energy.

PROGRAM REQUIREMENTS- HIGHLIGHTS

Tier 1. *NJ ENERGY*EFFICIENT Home Requirements:

Meet all ENERGY STAR v2.0 requirements, including:

- Comply with v2.0 Thermal Bypass check list
- Duct leakage to outside: ≤u6 CFM25 per 100ft2 CFA (no maximum total leakage)
- Up to 25% of Slab edge in CZ 4 & 5 may be un-insulated

Meet all additional New Jersey requirements:

- HERS index must not exceed 85 (2006 IECC base) or 75 (2009 IECC base)
- House size capped at ≤ 4000 sq. ft. Homes over 4000 sq. ft. requires \leq HERS 65
- Comply with NJ program specific HVAC check list
- Fully duct all HVAC supplies and returns and fully seal all duct system joints and seams with mastic compound (no tapes) as applicable
- Install ENERGY STAR qualified HVAC equipment (or highest available alternative)
- Install ENERGY STAR qualified mechanical ventilation with automatic 24-hour control, as required by American Society of Heating, Refrigerating, and Air-Conditioning Engineers
- (ASHRAE) 62.2 as applicable
- Install only direct or power vented space heating, water heating, and/or fireplace combustion appliances, when present
- Install ENERGY STAR lighting in 60% of all light sockets including interior and exterior, or
- EPA Advanced Lighting Package (ALP) for fixtures

Tier 2. ENERGY STAR Homes v 3.0 Requirements (Green Point options for LIHTC):

Meet all EPA ENERGY STAR Homes v 3.0 standards including:

- Meet a site specific (variable) HERS index target
- Comply with all EPA mandated checklists

- Install ENERGY STAR qualified HVAC equipment (or highest available alternative)
- Install ENERGY STAR qualified mechanical ventilation with automatic 24-hour control, as required by ASHRAE 62.2 as applicable
- Install only direct or power vented space heating, water heating, and/or fireplace combustion appliances, when present
- Duct leakage to outside: ≤ 4 CFM25 per 100ft2 CFA
- Total Duct Leakage: ≤ 6 CFM25 per 100ft2 CFA
- Completed Water Management System Builder Checklist (or Indoor airPLUS Verification Checklist)

Meet all additional New Jersey requirements:

• Fully duct all HVAC supplies and returns and fully seal all duct system joints and seams with mastic compound (no tapes) as applicable

Tier 3 Climate Choice Homes Requirements (Green Point options for LIHTC):

A set of requirements for meeting energy performance at least 50% better than IECC 2006 before the addition of on-site renewable energy generation, based on EPA's original "Climate Choice" guidelines. The requirements are anticipated to transition to EPA's new "Concept Home" guidelines, when released, as the underlying technical standard.

Multi-family High-Rise Program Requirements:

Requirements for applicable multi-family buildings over three stories will transition from the previous EPA ENERGY STAR Multi-family High Rise (MFHR) Pilot to the new EPA ENERGY STAR Multi-family High Rise (MFHR) Program standards released August 30, 2012, including:

- 15% more energy efficient than MFHR buildings built to the ASHRAE Standard 90.1-2007
- Follow Performance Path which utilizes ASHRAE approved energy modeling software to determine energy savings of a customized set of measures

2013 Financial Incentives per Single Family Unit for NJ ENERGYEfficient Homes (Tier 1) and ENERGY STAR Homes (Tier 2)

Incentives by Tier, Code & Index				
	vs. IECC 2006		vs. IECC 2009	
HERS	Tier 1 NJ ENERGYEfficient Home	Tier 2 ENERGY STAR Home	Tier 1 NJ ENERGYEfficient Home	Tier 2 ENERGY STAR Home
85	\$1,250	\$2,250		
80	\$1,500	\$2,500		
75	\$1,750	\$2,750	\$1,250	\$2,250
70	\$2,000	\$3,000	\$1,500	\$2,500
65	\$2,250	\$3,250	\$1,750	\$2,750
60	\$2,500	\$3,500	\$2,000	\$3,000
55	\$2,750	\$3,750	\$2,250	\$3,250
50	\$3,000	\$4,000	\$2,500	\$3,500

Multi-single units receive 75% and low-rise multi-family units receive 50% of the incentive levels listed above.

2013 Financial Incentives for Climate Choice Homes (Tier 3)1

Building Type	2013 NJ Climate Choice Homes
Single Family	\$10,000 to achieve 50 points, plus \$800 per index point below 50 points (maximum incentive is \$26,000/unit)
Multiple Single Family ("Townhouse")	\$7,000 to achieve 50 points, plus \$500 per index point below 50 points (maximum incentive is \$17,000/unit)
Multiple-Family Building ("Multi-family")	\$4,000 to achieve 50 points, plus \$400 per index point below 50 points (maximum incentive is \$12,000/unit)

¹ The per point incentives for HERS indices below 50 is for efficiency improvements only, not including renewable

2013 Climate Choice Homes Staged Incentive Payment Schedule

Building Type	At Completion of Enrollment (Sign-In)*	At Completion of Pre-Drywall Inspection(s)*	At Final Certification
Single Family	\$3,000	\$3,000	Balance
Multiple Single Family ("Townhouse")	\$2,000	\$2,000	Balance
Multiple-Family Building ("Multi-family")	\$1,000	\$1,000	Balance

^{*} Failure to complete the project, or to meet Tier 3 (NJ Climate Choice Homes) minimum specifications and/or performance goals, will result in repayment to the program of incentives paid, less any applicable incentives for meeting all lower tier (Tier 1 or 2) qualifying level requirements. In this circumstance, the Market Manager will generate a letter to the appropriate party requesting any monies due.

2013 Financial Incentives for ENERGY STAR Multi-family High-Rise

Multi-family High-Rise	Incentive
Incentive per Qualifying Unit	\$1,000

PROCESS & SUBMITTALS for NJ ENERGYEFFICIENT Homes:

1.	A Signed Letter of Intent, found within individual program documents (such as CHOICE & LIHTC)
2.	Prior to closing on construction financing and/or starting construction, submit the following documentation: Copy of HERS Rater Contract Market manager site submittal acceptance notification
3.	At construction completion, prior to NJHMFA's release of retention funds and/or closing for permanent financing, submit the following: Copy of your NJ ENERGY Efficient Homes Certificate(s)

PROCESS & SUBMITTALS for Tier 2 ENERGY STAR

1.	When applying for a commitment of funds include the following in your application:
	A Signed Letter of Intent, found within individual program documents (such as CHOICE & LIHTC)
	A copy of your ENERGY STAR Partnership Agreement, available online through www.energystar.gov
2.	Prior to closing on construction financing and/or starting construction, submit the following documentation: Copy of HERS Rater Contract
	☐ Market manager site submittal acceptance notification
3.	During the course of construction, make sure that your NJ ENERGY STAR Homes representative is at your first construction meeting and submit the following:
	Copy of your Pre-Drywall ENERGY STAR Inspection (including EPA Thermal Bypass Checklist)
4.	At construction completion, prior to NJHMFA's release of retention funds and/or closing for permanent financing, submit the following: Copies of your NJ ENERGY STAR Homes Certificate(s)

PROCESS & SUBMITTALS for Tier 3 Climate Choice

1.	When applying for a commitment of funds include the following in your application:
	A Signed Letter of Intent, found within individual program documents (such as CHOICE & LIHTC)
	A copy of your NJ ENERGY STAR® Homes "Tier 3" PARTICIPATION AGREEMENT, available online through www.energystar.gov
2.	Prior to closing on construction financing and/or starting construction, submit the following documentation: Copy of HERS Rater Contract Market manager site submittal acceptance notification
3.	During the course of construction, make sure that your NJ ENERGY STAR Homes representative is at your first construction meeting and submit the following: Copy of your Pre-Drywall ENERGY STAR Inspection (including EPA Thermal Bypass Checklist)
4.	At construction completion, prior to NJHMFA's release of retention funds and/or closing for permanent financing, submit the following: Copies of your NJ ENERGY STAR Homes Certificate(s)

NJ HOME PERFORMANCE WITH ENERGY STAR (for existing home and multifamily walkups 3 stories or less):

New Jersey's Clean Energy Program
www.njcleanenergy.com
c/o Conservation Services Group, Residential Market Manager
1-866-NJ-SMART

Home Performance with ENERGY STAR is designed to transform the way energy efficiency services are delivered to existing 1-4 family homes and low-rise multifamily buildings. A combination of <u>eligible</u> measures may be financed.

The EPA has determined that small multi-family (MF) building developments may participate in HPwES. The NJ HPwES program defines eligibility as buildings that:

- are no more than three stories high; have single ownership,
- have total building energy usage which is accessible through individual metering of the units within the multi-family structure, or a master meter at the building (as opposed to sites with multiple buildings heated by a central heating plant),
- are made up of five or more units in a single building, or multiple buildings (each with five or more units), within a single geographic boundary and with a single property management structure.

Multi-family facilities that do not meet this criteria fall into the Commercial & Industrial (C&I) program, Pay for Performance, for energy efficient measures.

The program will offer the following incentive structure for multi-family projects:

- Improvement packages showing a minimum of 10% but less than 20% estimated total building energy savings will receive a per unit incentive of \$500 not to exceed 50% of the costs of the approved measures used to calculate TES.
- Improvement packages showing a minimum of 20% but less than 25% estimated total building energy savings will receive a per unit incentive of \$1,000 not to exceed 50% of the costs of the approved measures used to calculate TES.
- Improvement packages showing 25% or greater estimated total building energy savings will receive a per unit incentive of \$1,500 not to exceed 50% of the costs of the approved measures used to calculate TES.

The total incentive amount for a multi-family project must not exceed 50% of the total costs of approved measures; approved measures are the same as for the single family houses and townhouses. If the total multi-family project incentive based on the above structure yields an amount greater than 50% of the costs of approved measures, the incentive amount offered will be lowered to the 50% maximum.

HPwES program improvements <u>must</u> consider a whole building approach to be approved. Individual units within a multi-family structure or development are not eligible for the program independently of the entire building or development; however, they may take advantage of other NJCEP offerings, such as <u>WARM</u> and <u>COOLAdvantage</u> programs.

The program will work with the contractor of a multi-family project to ensure proper project assessment and approval process. Multi-family buildings are to be addressed in accordance with the BPI Multi-family Building Standards. The program will only approve such projects for contractors that have at least one staff member holding BPI Multi-family certification.

Through this program, contractors certified by the <u>Building Performance Institute</u> (BPI)¹ **OR** the Home Performance with ENERGY STAR program manager (Conservation Services Group) will conduct an energy audit on single-family homes and small multifamily (MF) building developments (up to 3 stories with no elevator) for \$125. This audit fee will be reimbursed if the building owner completes Tier 3 items totaling at least \$2,000 (see below). During the audit the inspector will (a) test for air contaminants and do a visual inspection (Tier 1), (b) if there are no carbon monoxide or other noxious gasses that need to be addressed, offer a free half-day air-sealing service (Tier 2) and (c) generate a list of measures that can be implemented to make the home more energy efficient (Tier 3). The audit will **not** include estimates of the cost to complete these measures.

Participating contractors in the New Jersey Home Performance with ENERGY STAR program are independent home improvement contractors who have been accredited and certified by the Building Performance Institute. The contractors who participate in the program warrant their own work and may charge different fees for services they provide, including the home assessment if additional testing is included. Any contractor in the state of New Jersey may apply to become BPI-certified.

The contractor will work with the owner to identify sources of wasted energy and help make money-saving improvements, such as insulation and air-sealing, windows and doors, lighting and appliances, and upgraded heating and cooling systems. Equipment incentives offered through this program cannot be combined with other Office of Clean Energy equipment incentives.

Select the Tier 1 package for compliance with NJHMFA ENERGY STAR requirements.

In addition to minimum requirements outlined within this program, the following replacements are required for all moderate and substantial rehabilitation projects receiving NJHMFA financing that requires ENERGY STAR Homes (or equivalent) certification:

Owner shall complete Tiers 1 and all items as recommended by BPI-certified contractor or Conservation Services Group auditor – extent of items to be approved by NJHMFA.

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¹ The Building Performance Institute (BPI) is a national resource for building science technology that, among other things, sets standards for assessing and improving the energy performance of homes.

Customer Incentive Tiers and Requirements

Incentive Tier	Requirements	Customer Incentive
Tier 1	Home Assessment/Energy Audit: To be eligible for HPwES incentives, a homeowner must have a home assessment (audit) performed by a certified contractor.	None
Tier 2	Estimated total energy savings (TES) of at least 10% and less than 20%. -Must install air sealing. -May install insulation and may also install duct sealing and duct insulation measures. -Participants may also include water heater measures from the eligible measures list.	\$2,000 rebate, not to exceed 50% of the costs of the eligible measures used by your contractor to calculate TES and Up to a \$5,000 loan at 0% where a utility loan is unavailable
Tier 3	Level 1 - Estimated TES of at least 20% and less than 25%. Must install at least two measures including air sealing from the eligible measures list.	\$4,000 rebate, not to exceed 50% of the costs of the measures used to calculate TES and and Up to a \$10,000 loan at 0% where a utility loan is unavailable.
Tier 3	Level 2 - Estimated TES of at least 25% or greater. Must install at least two measures including air sealing from the eligible measures list.	\$5,000 rebate, not to exceed 50% of cost of the measures used to calculate TES and Up to a \$10,000 loan at 0% where a utility loan is unavailable*

*Incentives and Requirements Notes:

- New Jersey utilities will offer 0% loans or on-bill repayment up to \$10,000 for Tier 3 projects and \$5,000 for Tier 2 projects to underwrite the non-rebated portion of the customer cost for HPwES jobs in their service territories. NJCEP will offer 0% loans for HPwES work for any customers where a utility loan program is not in place.
- Appliances, lighting, doors, and windows are not eligible measures for program incentives.
- The measures used to calculate TES may also include health and safety measures and qualified accessories, as listed on the NJ HPwES eligible measures document, as a component of the installation of eligible measures.
- Incentives are payable only upon satisfactory project completion.

PROCESS & SUBMITTALS for Home Performance with ENERGY STAR:

A signed agreement/contract with the BPI contractor you will use (not provided by program) A Signed 'ENERGY STAR Equivalency Letter of Intent', found within individual and the CHOIGE of LINES.
program documents (such as CHOICE & LIHTC) Prior to closing on construction financing and/or starting construction, submit the following documentation (double-check that this is accurate): Comprehensive Package List Signed Contract with BPI certified contractor
NJ Home Performance with ENERGY STAR financing confirmation letter
During the course of construction, ensure that your BPI-certified contractor is at your first construction meeting.
At construction completion, prior to NJHMFA's release of retention funds and/or closing for permanent financing and/or release of construction loan, submit the following: Certification of completion of work from contractor Confirmation of completion of work from NJ Home Performance with ENERGY STAR Program manager

NJ PAY FOR PERFORMANCE BUILDINGS (EXISTING):

New Jersey's Clean Energy Program www.njcleanenergy.com c/o TRC Energy Services, C&I Market Manager 1-866-NJ-SMART

This program is available to <u>EXISTING</u> Multifamily Projects that do not qualify to participate in ENERGY STAR Homes or Home Performance with ENERGY STAR because they are too large for those programs.

Pre-approval is required for almost all energy efficiency incentives. This means you must submit the online Registration Form, program Application Form (and applicable worksheets) and receive approval before any equipment is installed or start of construction.

IMPORTANT INFORMATION:

Applicants should apply first through the <u>Pay for Performance program</u>. If not allowed to participate in this program (provide email or letter from program indicating such), then NJHMFA will work with the Pay for Performance market managers and the applicant team to put together an energy efficiency equivalency letter based on the following possible incentives also offered through the Pay for Performance Incentives program:

- o Design Support for Larger Projects,
- o Technical Assistance for Smaller Projects,
- o Support for Custom Energy Efficiency Measures and
- o Incentives for Qualifying Equipment and Projects.

Pay for Performance Program Eligibility

Existing large Multifamily affordable housing projects are eligible to participate in this program. The requirement that projects have a minimum 100kW baseload has been eliminated for multifamily affordable properties. To determine the appropriate energy efficiency program for a project, follow the Program Logic Tree on Page 5 of this Guide. An Energy Reduction Plan must define a comprehensive package of measures capable of reducing the existing energy consumption of your building by 15% or more. An approved Program Partner may be able to make a preliminary assessment of a project's ability to achieve a 15% reduction.

INCENTIVES:

Pay for Performance incentives are awarded upon the satisfactory completion of three program milestones:

Incentive #1

• <u>Submittal of complete Energy Reduction Plan prepared by an approved Program Partner.</u> Contingent on moving forward, incentives will be between \$5,000 and \$50,000 based on approximately \$0.10 per square foot, not to exceed 50% of the facility's annual energy expense.

Incentive #2

• <u>Installation of all recommended measures.</u> Incentives are based on the projected level of electricity and gas savings, resulting from the installation of comprehensive energy efficiency measures.

Incentive #3

• Completion of Post-construction Benchmarking report. A completed report verifying energy reductions based on one year of post-implementation results. Incentives for electricity savings and natural gas savings will be paid based on actual savings, provided that the minimum performance threshold of 15% savings has been achieved.

PROCESS & SUBMITTALS for Pay for Performance:

1.	When applying for a commitment of funds include the following in your application:
	A signed agreement/contract with the Program Partner you will use (pre-selected companies; a list can be found on www.njclenenergy.com/ssb website)
	☐ A copy of your Pay for Performance Application Package
	☐ A copy of your Notice to Proceed, with Pay for Performance Case Manager noted
2.	Prior to closing on construction financing and/or starting construction, submit the following documentation:
	Copy of Energy Reduction Plan
	Copy of your Benchmarking Report
3.	During the course of construction, your Pay for Performance Case Manager and Program Partner will monitor construction.
4.	At construction completion, prior to NJHMFA's release of retention funds and/or closing for permanent financing, submit the following: Copy of Substantial Completion Construction Report Copy of rebate/incentive receipt from Pay for Performance program
	T. J.

NJ PAY FOR PERFORMANCE BUILDINGS (NEW CONSTRUCTION):

New Jersey's Clean Energy Program
www.njcleanenergy.com
c/o TRC Energy Services, C&I Market Manager
1-866-NJ-SMART

This program is available to <u>NEW CONSTRUCTION</u> Multifamily Projects that do not qualify to participate in ENERGY STAR Homes or Home Performance with ENERGY STAR because they are too large for those programs.

Pre-approval is required for almost all energy efficiency incentives. This means you must submit the online Registration Form, program Application Form (and applicable worksheets) and receive approval before any equipment is installed or construction starts.

IMPORTANT INFORMATION:

Applicants should apply first through the <u>Pay for Performance program</u>. If not allowed to participate in this program (provide email or letter from program indicating such), then NJHMFA will work with the Pay for Performance market managers and the applicant team to put together an energy efficiency equivalency letter based on the following possible incentives also offered through the Pay for Performance Incentives program:

- o Design Support for Larger Projects,
- o Technical Assistance for Smaller Projects,
- o Support for Custom Energy Efficiency Measures and
- o Incentives for Qualifying Equipment and Projects.

Pay for Performance Program Eligibility

New Multifamily affordable housing projects are eligible to participate in this program and The requirement that projects have a minimum 50,000 sq.ft. has been eliminated for multifamily affordable properties. Generally, a project must be located in a Smart Growth area to participate. To determine the appropriate energy efficiency program for a project, follow the Program Logic Tree on Page 5 of this Guide. An Energy Reduction Plan must define a comprehensive package of measures capable of reducing the existing energy consumption of your building by 15% or more. An approved Program Partner may be able to make a preliminary assessment of a project's ability to achieve a 15% reduction.

INCENTIVES:

Pay for Performance incentives are awarded upon the satisfactory completion of three program milestones:

Incentive #1

• <u>Submittal of complete Energy Reduction Plan prepared by an approved Program Partner.</u> Based on design development documents. Contingent on moving forward, incentives are based on \$0.10 per square foot up to \$50,000.

Incentive #2

• <u>Installation of all recommended measures.</u> Submittal of a complete as-built energy reduction plan - based on actual installed energy efficiency measures. Incentives are based on \$1.00 per square foot.

Incentive #3

• <u>Completion of Post-construction Benchmarking report</u>. Submittal of a completed report with commissioning results verifying performance of energy efficient equipment. Provided that the minimum performance threshold of 15% has been achieved, incentives are based on \$0.35 to \$0.65 per square foot.

PROCESS & SUBMITTALS for Pay for Performance:

1.	When applying for a commitment of funds include the following in your application:
	A signed agreement/contract with the Program Partner you will use (pre-selected companies; a list can be found on www.njclenenergy.com/ssb website)
	☐ A copy of your Pay for Performance Application Package
	☐ A copy of your Notice to Proceed, with Pay for Performance Case Manager noted
2.	Prior to closing on construction financing and/or starting construction, submit the following documentation: \$\sum_{\text{Copy}}\$ Copy of Energy Reduction Plan
	Copy of your Benchmarking Report
	Copy of your Benchmarking Report
3.	During the course of construction, your Pay for Performance Case Manager and Program Partner will monitor construction.
4.	At construction completion, prior to NJHMFA's release of retention funds and/or closing for permanent financing, submit the following: Copy of Substantial Completion Construction Report Copy of rebate/incentive receipt from Pay for Performance program

FOR THOSE WHO CANNOT PARTICIPATE IN A FORMAL PROGRAM

- □ Submit letters or emails from Clean Energy Program managers (or applicable program(s)) stating that you cannot participate in their program(s).
- □ Submit the Letter of Intent included within the appendices of this document.
- □ Meet with NJHMFA PRIOR TO when funds are awarded. We will review the project and draft an "ENERGY STAR Equivalent Letter of Understanding" (sample included within this document). This letter shall be signed <u>prior to start of construction</u> and/or close of construction financing.
- □ Submit photographs of all items in "Letter of Understanding" in the quantity to be determined by your NJHMFA Field Inspector to the Technical Services Advisor.
- □ The NJHMFA Field Inspector will confirm that items have been implemented satisfactorily prior to permanent financing.
- □ NJHMFA will issue a letter confirming successful completion of the Equivalency requirements.

COMMENTS ON MASTER-METERED PROJECTS:

Several policies to consider:

- □ NJHMFA strongly prefers that at least one utility (electric or gas) be individually metered. This will encourage demand-side efficiencies.
- □ NJ ENERGY Efficiency Homes requires that at least one utility (electric or gas) be individually metered or submetered. EPA ENERGY STAR Homes does not.
- □ For example, it is acceptable to have radiator heating on a common boiler and gas line while individually metering electric use, for cooling.

Examples of scenarios where a project might be master-metered:

- □ Special Needs project where the owner/manager will be paying all utility bills. Please keep in mind that for permanent placement housing and transitional housing projects, NJHMFA encourages tenants to pay for their own utilities. If a project wishes to master-meter a substantial argument must be made to NJHMFA financial officers and technical services division.
- □ A moderate/minimum-rehabilitation multifamily project that has an existing master-metered system and/or an historic project.

COMMENTS ON ELECTRIC HEATING:

- □ NJHMFA would strongly prefer that heating not be solely electric, especially if tenants are expected to pay their own electric bills. If the developer wishes to provide electric-only, individually-metered heating, submit documentation covering the expected costs to tenants, various alternative heating design scenarios/sketches, and construction costs for various systems, etc. A substantial argument must be made to NJHMFA financial officers and technical services divisions to gain approval.
- □ Electric resistance heating (except within some heat pumps) should be avoided and will almost always eliminate a project from compliance with ENERGY STAR due to the impact on projected energy consumption.



New Jersey Housing and Mortgage Finance Agency 2013 ENERGY STAR EQUIVALENCY LETTER OF INTENT:

By signing this document, I certify the following ("we" refers to the applicant organization):

- 1. We understand that ENERGY STAR certification (or equivalent) is a prerequisite to participation in the <u>Low-Income Housing Tax Credit</u> program, we agree to complete the applicable ENERGY STAR equivalency program, and will comply with the submission requirements listed in the NJHMFA ENERGY STAR requirements document.
- 2. We understand that no projects are exempt from this requirement and have reviewed the alternative programs (if needed) for compliance as indicated in the NJHMFA ENERGY STAR requirements document.
- 3. If requested we will allow the NJHMFA, or designee, access to the project site pre, during and post construction for the purpose of but not limited to confirming ENERGY STAR compliance.
- 4. NEW CONSTRUCTION PROJECTS MUST SELECT EITHER 'NJ ENERGYEfficient Homes' or 'NJ ENERGY STAR Homes (version 3)'
- 5. WHEN LIHTC IS AWARDED, CONTACT NJHMFA FOR THE NEXT COMPLIANCE STEPS.
- 6. I am an authorized representative of the organization.

	Signature:	Date:	
	Name of signer:		
	Title:		
	Project Name:		
	Organization:		
<u>CHEC</u>	$\underline{\mathbf{K}}$ THE NJHMFA ENERGY STAR EQUIVL	LENCY Requirement Program most likely to p	participate in:
	NJ ENERGYEfficient Homes	PAY FOR PERFORMAN NEW CONSTRUCTION	[CE
	NJ ENERGY STAR Homes V.3	PAY FOR PERFORMAN	_
	HOME PERFORMANCE WITH ENERGY STAR	EXISTING CONSTRUCT NJHMFA EQUIVALEN	
		(to be co-signed with NJHMF	



ENERGY STAR EQUIVALENT LETTER OF UNDERSTANDING:

JHMFA ENERGY STAR Equivalency Requirements

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New Jersey Housing and Mortgage Finance Agency For Compliance with ENERGY STAR EQUIVALENCY requirements

Sample Letter of Intent for AnyProject, Anytown, NJ

By signing this document, I certify the following ("we" refers to the applicant organization):

We understand that our project is not exempt from ENER	GY STAR requirements and that we have attempted and
are unable to participate in one of the formal program	ns presented within the current 'Guide to NJHMFA
ENERGY STAR Requirements' document. This project	shall fulfill the threshold ENERGY STAR requirement
for the purposes of the Green Future / Low-Income Ho	ousing Tax Credit (circle applicable) program(s) by
complying with the minimum standards set forth in (1)	through (4) below. The minimum rehab project named
, located at,	, NJ, will comply with the following minimum
requirements, which will be confirmed by the NJHMFA.	

1. Structural Work:

- a. Specified new Tyvek is to be installed per manufacturer's instructions that include taping at all seams if siding is replaced.
- b. If penetrations in exterior or inter-unit walls are exposed during renovation (from either interior or exterior sides), they are to be air-sealed with either foam or caulk sealant (Fiber Glass batts, Thermo-fiber or Rock wool is not acceptable).
- c. If the moderate rehab requires/includes demolition of the walls/ceilings in contact with the exterior envelope, the following insulation levels will be installed:
- d. Walls......R-13
- e. Roof/ceilings......R-19 to R-30 (depending on joist/rafter sizes)
- f. Unfinished basement.......R-10 walls; R-19 floor above

2. General Apartment Renovation:

- a. All windows (other than Historic facades) will be replaced with energy efficient windows having a low-e coating. Windows to have maximum U-factor of 0.35 and a maximum solar heat gain coefficient (SHGC) of 0.39.
- b. All appliances (refrigerators, ranges (electric) and range hoods) will be ENERGY STAR rated.
- c. All light fixtures (interior and exterior building mounted) will be replaced with energy efficient fixtures having the ENERGY STAR label (excludes closets and unfinished basement areas). The closets and unfinished basement fixtures will have a screw-in compact fluorescent.
- d. A much as possible floors, walls, and ceilings are to be air sealed with caulk or foam at any and all penetrations through sheetrock and/or floor (i.e., mechanical, electrical and or plumbing penetrations) or where one construction material meets another, (i.e., replaced window sills)
- e. Flooring: if framing to sub-floor/flooring of perimeter of apartment is exposed during installation, seal at this joint with caulk to prevent exterior, inter-unit or unit-to-hallway infiltration.
- 3. Boilers, Heating & Plumbing Work:
 - a. If the existing hot air furnace is replaced, it will be replaced with 90% AFUE (efficiency) units.
 - b. If air conditioning is to be provided, it will be provided with SEER 13 and 11.0 EEF (efficiency) units.
 - c. If the replaced existing replaced, will hot water heater it be with efficiency: 40 0.61, 60 = 0.57;gas gal gal electric efficiency: 40 gal = 0.93, 50 gal = 0.92.
 - d. New thermostats will be specified/installed with ENERGY STAR qualified type.
- 4. All bathroom ventilation fans will be replaced with fan having a maximum 0.5 watts/CFM and 2.0 sones on automatic controls.

ENERGY STAR EQUIVALENT LETTER OF UNDERSTANDING Page 2

We understand that the requirements for minimum rehab projects include the following submissions to the NJHMFA: Photographs will be submitted on each of the items above for a number of sites as determined reasonable by the project's designated NJHMFA Field Representative.

If requested we will allow the NJHMFA, or designee, access to the project site pre, during and post construction for the purpose of but not limited to confirming compliance with the above requirements.

I am an authorized representative of the organization.

Signature:	Date:
Name of Signer:	
Title:	
Project Name:	
Organization:	
Approval of NJHMFA FOR AGENCY USE ONLY	
Signed:	Date: